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How Business Leaders View Plans for Plant Expansion and Relocation

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Recent studies of business climate have received a great deal of attention from the media and from government officials. The Alexander Grant survey, published for the seventh consecutive year, drew considerable criticism from Michigan's governor as well as other Michigan government and business leaders. John Mattila [1] provided a more detailed comparison and critique of two business climate studies, the Alexander Grant survey and the *INC.* small business climate study. In a review of fourteen different business climate studies by Mattila and Thompson [2], Michigan was ranked as having one of the worst business climates of the forty-eight contiguous states.

The study reported in this article was conducted for two reasons. No previous study had focused on Michigan business only, examining perceived problems of different types of manufacturers in various areas of the state. Also, no previous study had attempted to relate the business leaders' perceptions of an area's business climate to their relocation or expansion decisions. A brief summary of the results of our survey follows.

The study was conducted by a team of social scientists from the Center for the Redevelopment of Industrialized States (CRIS) at Michigan State University. The Michigan Chamber of Commerce provided a list of 950 names, drawn randomly from its members in the manufacturing sector. Forty-three percent, or 406 companies, responded to the survey. Characteristics of all Michigan companies, as reported by the U.S. Department of Commerce, and comparisons of the respondents and the nonrespondents are presented in Table 1. The respondents overrepresented fabricated metals companies and underrepresented machinery manufacturers when compared with the actual number in Michigan. The respondents' companies were about as large as the nonrespondents' but were larger than the average Michigan company. In the past five years, 39 percent of the respondents expanded their facilities, and 44 percent opened a new facility. In general these figures applied across the state, but there was some variation by location; 52 percent of the Detroit area respondents reported opening a new facility but only 31 percent of those from Grand Rapids.

Table 1. Characteristics of Selected Michigan Businesses (in percentages)

Characteristics	Actual businesses[a]	Membership list[b]	Responding sample
SIC (Standard Industrial Code) category			
Food and kindred	5	8	7
Lumber, wood, furniture, paper	12	11	11
Chemicals, rubber, plastics, etc.	20	27	20
Fabricated metals	20	20	44
Machinery	38	27	12
Transportation equipment	5	7	5
Number of Employees			
0–100	91	40	37
100–500	7	49	49
500–1000	1	7	7
Over 1000	1	4	7
Increased Facilities in Past Five Years			
Did build	n.a.	n.a.	44
Did not build	n.a.	n.a.	56
Sample size	11,176	950	406

a. U.S. Department of Commerce, Bureau of the Census, **County Business Patterns—Michigan 1982** (CBP-82-24), Table 1B, June 1984.
b. Michigan Chamber of Commerce, 1984 membership list.
n.a.: Data not available.

IMPORTANCE OF RELOCATION FACTORS

Respondents were sent a list of thirty-four factors that might affect their decisions when considering an expansion or relocation of their firms. Each factor was rated for its importance on a six-point scale, with six as the most important factor and 1, a factor of no im- as the most important factor and one, a factor of no importance are shown in Table 2, column 1. Productivity of workers ranked first, followed by labor relations, costs of workers' compensation, wage rates, and the business

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Michigan Economic Indicators

Item	Year previous of latest month	Previous month	Latest month
Manufacturing workers			
Average weekly hours, Michigan	42.3	42.6	42.6 (Aug.)
Average weekly hours, U.S.	40.4	40.1	40.4 (Aug.)
Average hourly earnings, Michigan ($)	12.15	12.64	12.58 (Aug.)
Average hourly earnings, U.S. ($)	9.15	9.52	9.50 (Aug.)
U.S. motor vehicle production (units)	785,081	844,854	924,982 (Sept.)
Electricity usage (mil. kwh.)			
Michigan	5,715	5,790	5,902 (May)
United States	175,003	177,345	177,596 (May)
Raw steel production			
Michigan (000 net tons)	623	644	626 (Aug.)
United States (000 net tons)	6,915	7,010	7,130 (Aug.)
Consumer price index (1967 = 100)			
Detroit area	307.7	317.0	318.0 (July)
United States	311.7	322.3	322.8 (July)
U.S. producer price index (1967 = 100)	312.0	309.5	309.0 (July)
Michigan farm prices received index (1977 = 100)	132	114	111 (Aug.)

SOURCE: U.S. Bureau of the Census; U.S. Bureau of Labor Statistics; Michigan Crop Reporting Service; Ward's Automotive Reports; American Iron and Steel Institute; and Energy Information Administration.

Permit Authorized Construction in Selected Counties, First Eight Months 1984 and 1985

(In thousands of dollars)

	Residential		Industrial		Office		Mercantile	
	1984	1985	1984	1985	1984	1985	1984	1985
Allegan	8,012	1,395	10	0	96	0	70	310
Antrim	866	861	15	19	0	0	52	140
Berrien	5,076	1,998	535	928	922	0	475	469
Clinton	8,162	6,956	23	418	0	71	522	363
Emmet	4,494	4,319	0	0	0	160	68	0
Genesee	19,355	28,830	9,615	25,430	4,181	7,850	10,289	9,317
Grand Traverse	15,654	10,603	1,734	775	598	859	1,285	899
Ingham	31,138	28,534	983	58	7,788	10,309	4,234	3,721
Jackson	4,493	2,931	314	616	62	1,166	355	738
Kalamazoo	20,432	25,248	4,062	852	1,939	7,544	794	1,316
Kent	78,227	81,915	13,902	41,786	5,281	16,122	9,204	6,959
Livingston	14,479	24,274	3,612	16,665	255	709	1,129	1,431
Macomb	90,165	142,495	18,670	42,621	3,318	7,092	11,341	26,435
Midland	12,929	6,363	378	44	3,469	975	308	11
Muskegon	9,363	5,770	1,726	600	665	313	1,881	1,512
Oakland	215,625	404,808	63,367	79,874	84,951	173,169	20,831	23,258
Ottawa	29,126	43,698	12,749	7,139	1,019	3,161	3,754	1,464
Saginaw	4,711	2,352	526	63	571	1,083	707	3,559
St. Clair	7,893	10,984	1,097	3,202	1,710	717	453	803
Washtenaw	27,717	45,473	7,263	3,132	5,049	12,612	598	4,607
Wayne	95,547	127,674	41,263	139,441	36,249	34,543	14,082	47,797
MICHIGAN	869,200	1,151,986	207,009	374,956	187,165	288,154	96,429	150,179

SOURCE: Bureau of the Census, special release.

climate (attitudes toward industry). Analyses showed very few differences in the importance ratings, either among the different types of industries in the sample or among the different locations. We did find some differences, however, when we analyzed the ratings by the size of the firms. In general, large firms gave all factors more weight than did small firms. They also gave Michigan a higher rating than small firms when asked to make the comparisons described in the next section.

Table 2. Factors Related to Expansion and Relocation (mean figures)

	Importance	Comparison with other states
Productivity of workers	4.53	3.19
Labor relations	4.47	2.21
Costs of workers' compensation	4.45	1.61
Wage rates	4.35	2.14
Business climate (attitudes toward industry)	4.32	2.12
Costs of unemployment compensation	4.31	1.67
State taxes on businesses	4.25	1.88
Local taxes on businesses	4.10	2.14
Extent of worker unionization	4.03	2.04
Distance to customers	3.78	4.22
Availability and cost of energy	3.70	3.38
Costs of property and construction	3.69	2.84
Availability of skilled workers	3.68	4.52
State and local taxes on individuals	3.56	2.21
State and/or local financial inducements to new businesses	3.52	2.58
Availability of unskilled or semiskilled workers	3.41	3.80
Transportation facilities for materials and products	3.40	4.05
Zoning and other regulations	3.31	3.09
Availability of technical or professional workers	3.27	4.26
Ample area for future expansion	3.24	3.60
Crime rate	3.24	2.97
Environmental protection requirements	3.21	3.00
Distance to services	3.20	4.30
Cost of living	3.16	3.09
Distance to materials	3.13	4.16
Style of living for employees	3.07	3.83
Fiscal health of state	3.01	2.86
Personal preferences of company executives	2.97	4.14
Local sources of financing	2.94	3.54
Water supply and costs	2.93	4.07
Distance to other facilities of the company	2.63	4.31
Transportation facilities for people	2.54	4.00
Marketing facilities	2.47	4.07
Size of city or town	2.45	3.84

COMPARISON WITH OTHER STATES

We asked respondents to use a seven-point scale and tell us how Michigan compared to an attractive alternative state with respect to the same thirty-four factors. In the second column of Table 2, we present the mean for each factor on this comparison judgment. A mean above 4.0 indicates that Michigan was rated better than the other state on that factor, a 4.0 indicates that the two were perceived similarly, and less than 4.0 indicates the other state was considered superior to Michigan. This question may be hard on Michigan, because the respondent could pick any of the other forty-nine states with which to make the comparisons, even though it might prove virtually impossible to move there. Maine may have no automobile plants, but a manufacturer of machine parts oriented entirely to the auto industry could still select Maine as the state to compare.

With these caveats in mind, how does Michigan compare to other states? With respect to distance to customers, materials, services, and other facilities of the company, Michigan is rated higher than other states. Michigan is also rated favorably on the availability of skilled workers. But on most other factors, other states are judged superior to Michigan. Especially unfavorable ratings were given to costs of workers' compensation, unemployment compensation, state taxes on business, extent of worker unionization, and productivity of workers.

In general the larger firms favored Michigan more than the smaller firms. Further, smaller firms' ratings of the importance of factors were not entirely the same as the larger firms'. For example, smaller firms—those with under 100 employees—were more likely to rate higher the importance of personal preferences of company executives and the importance of closeness to transportation for materials and products and marketing facilities. Large companies were more likely to rate higher the importance of transportation facilities for people and of water supply and costs.

COMPARISON WITH ALTERNATIVE SITES

We asked respondents to name a state in which they had recently built a new facility or had expanded an existing plant. In our sample, 22 percent had expanded in Michigan, 4 percent in Indiana, and approximately 2 percent in Georgia, in North Carolina, in Ohio, in South Carolina, and in Texas. The remaining 8 percent expanded in other states. The analyses described in this section examine whether or not the places chosen for relocation were related to the comparison judgments described in the previous section. That is, did companies who compared Michigan unfavorably to another state on certain factors expand in Michigan or relocate elsewhere?

We expected to find that executives who had built in Michigan would have rated Michigan more favorably than some other state, and this is what we found for some factors, for example, distance to other facilities of the company. Those who had moved plants to Indiana rated Michigan lower on most factors than those who remained in Michigan. However, those who had moved plants to Texas favored Michigan more than those moving to other states. Executives selecting South Carolina for their plants were the least favorable to Michigan. The number of executives reporting moves to other states was quite small—fewer than ten to each state—except for the eighteen who moved to Indiana. One interesting finding was that executives who moved plants to Texas gave Michigan higher ratings than those who reported building new plants in Michigan. Among the factors rated higher were attitudes toward industry, state and local

business taxes, state and local taxes on individuals, and workers' compensation costs.

DETERMINING FACTORS

We also tried to determine the degree to which specific types of factors were important in the actual decision to build in another state or to build in Michigan. Eighty-eight companies reported building a plant in Michigan in the last five years and eighty-nine reported building elsewhere. We regressed this building decision on eight clusters of the original thirty-four factors which seemed rationally defensible and were supported by factor analysis. The content for each of these groups is:

- tax—state taxes on business, local taxes on business, state and local taxes on individuals, workers' compensation costs, unemployment costs;
- natural resources—area for expansion, costs of property and construction, water supply and costs, energy costs, zoning and regulations, environmental requirements;
- labor—availability of unskilled workers, productivity of workers, wage rates, labor relations, worker unionization;
- quality of life—size of city or town, state fiscal health, employee style of living, cost of living, crime rate, personal preference of CEO;
- skilled work force—availability of skilled workers, availability of technical or professional workers;
- finance—local sources of financing, state and/or local financial inducements to new businesses;
- distance—distance to customers, materials, services, and company facilities;
- transportation—transportation facilities for materials and products and people.

In Table 3, we provide the beta weights and correlations for the relocation factors for the respondents' importance ratings. As can be seen, the importance of distance, finance, and labor factors are significantly related to the decision to build in Michigan versus elsewhere. The more important labor is, the more likely a firm is to build *outside of Michigan*. The more important local financing, financial inducements, and distance factors are, the more likely the firm is to build *in Michigan*.

Table 3. Regression Results for Importance of Factors

Predictor	Correlation	Beta Weight
Tax	−.11	−.03
Natural Resources	.02	.00
Labor	−.18	−.22*
Quality of Life	−.03	−.10
Skilled Workforce	.10	.10
Finance	.11	.17*
Distance	.29	.28*
Transportation	.08	.06
Multiple Correlation (R)		.40
Adjusted R		.35

N = 170
*$p < .05$

Table 4 presents the results of similar analyses for the respondents' comparison ratings. The only two significant factors in this analysis were distance and labor factors. The more Michigan was perceived as equal or superior to alternative states on these two factors, the more likely a firm was to locate in Michigan.

Table 4. Regression Results for Comparison Judgments

Predictor	Correlation	Beta Weight
Tax	−.08	−.08
Natural Resources	−.01	−.14
Labor	.20	.25*
Quality of Life	.13	.13
Skilled Workforce	.03	−.16
Finance	.10	.09
Distance	.33	.37*
Transportation	.11	−.03
Multiple Correlation (R)		.45
Adjusted R		.39

N = 135
*$p < .05$

Finally, in Table 5 we present the results for importance and comparison judgments combined. Since these two sets of judgments were not correlated and since each was related to the actual decision to relocate, the multiple R rating all sixteen sets of judgments is significantly higher than either the importance or comparison judgments alone. As one can see, the significance of finance and distance as factors is reaffirmed by this analysis, but in addition, we see that the more important natural resources are to company heads, the less likely they are to build. And if a skilled work force is perceived as better in another state, the less likely it is that a company builds in Michigan. Labor factors drop out when the two sets of ratings are combined into one analysis.

Table 5. Regression Results for Importance and Comparison Judgments

Predictor	Beta Weight
Importance	
Tax	−.06
Natural Resources	−.21*
Labor	−.10
Quality of Life	.03
Skilled Workforce	−.05
Finance	.25*
Distance	.29*
Transportation	.00
Comparison	
Tax	−.14
Natural Resources	−.19*
Labor	.22
Quality of Life	.09
Skilled Workforce	−.18*
Finance	.18*
Distance	.29*
Transportation	−.03
Multiple Correlation (R)	.59
Adjusted R	.55

N = 135
*$p < .05$

(Continued on page 8)

Brief

Bureau of Economic Analysis personal income estimates are unique in that they provide users with an economic base profile, extending over a span of more than forty years and covering more than three thousand subareas. These can be combined into any multicounty geographic area needed. That is, it covers the nation county-by-county; it is prepared annually, and it is presented in substantial industrial detail.

Because of its conceptual scope and its richness of component detail, personal income can be used to measure and trace the levels and types of income flows received or earned by individuals residing or working in a specific political subdivision or micro-economy. Thus, it provides a local area data base for economic decision-making and for the implementation of those federal, state or local government programs requiring an analysis of economic activities in, or the economic well-being of, the residents of a particular area. Specific applications include its use as a measure of the size of the consumer market; as an indirect measure of the industrial market; as a measure of the quality of a market and the economic welfare of an area's residents; as an indicator of an area's economic health; as an analytical framework which can be used in assessing an area's economy and against which alternative developmental programs can be evaluated or as a basis for gauging the capacity of an area to support public service expenditures.

Personal income is the sum of several hundred individually estimated component flows, both monetary and non-monetary, and it encompasses most forms of income flowing to persons including federal, state and local governments, households, institutions, and foreign governments.

Two of the most important characteristics of the county income estimates are that they are constructed from a wide variety of statistical information not necessarily designed for income estimation (this information consists mainly of data obtained from business and government records showing disbursements to individuals) and that BEA national and state estimates of personal income are used as statistical "frames of reference." Thus state totals are allocated to the counties on the basis of the best available data. A detailed procedure of estimation is followed to maximize reliability and to obtain analytically useful information by county on income by type and by industry. This use of extensive detail is the hallmark of a reliable measurement effort because it reflects with reasonable reliability the inter-industry or intercomponent differentials at both the state and county levels and it provides the detail needed to audit the sources and methods of estimation. This approach has an added virtue in that it gives us the opportunity to take maximum advantage of the benevolent "law" of offsetting error.

Earnings growth comparisons of Michigan counties shown in Tables 1, 2, and 3 are based on data recently released by the Bureau of Economic Analysis. BEA county earnings estimates are developed from reports that employers file with state employment agencies and from tax returns filed with the Internal Revenue Service. Total earnings are comprised of labor income and the net incomes of nonincorporated business enterprises—proprietary motels, restaurants, and grocery stores—as well as the businesses of professionals, such as physicians, dentits, lawyers, and trade contractors. These data are the best available yardsticks of economic activity taking place in counties, although they are not as comprehen-

Table 1. Ranking of Michigan Counties According to Growth in Labor and Proprietors' Earnings, by County in which Earned: 1982-1983

	Percentage change 1982-1983		Percentage change 1982-1983
Iron	17	Ionia	6
Cass	16	Clare	6
Montcalm	12	Allegan	6
Clinton	12	Tuscola	5
Genesee	12	Lake	5
Monroe	11	Mecosta	5
Ingham	11	Shiawassee	5
Wexford	11	Marquette	5
Iosco	11	Montmorency	5
Emmet	11	Gratiot	5
Alger	11	Lenawee	5
Manistee	10	Keweenaw	5
Ottawa	10	Isabella	5
Benzie	10	Mason	5
Oscoda	10	Ogemaw	5
Otsego	10	Alcona	5
Macomb	10	Cheboygan	4
Osceola	10	Wayne	4
Roscommon	9	Berrien	4
Branch	9	Baraga	4
Saginaw	9	St. Clair	4
Leelanau	9	Charlevoix	4
Arenac	9	Presque Isle	3
Lapeer	9	Bay	3
Livingston	9	Muskegon	3
Kent	9	Van Buren	3
Menominee	9	Crawford	3
Oakland	9	Chippewa	2
Washtenaw	9	Barry	2
Houghton	9	Calhoun	2
Oceana	8	Midland	2
Alpena	8	Delta	2
Gladwin	8	Jackson	2
Mackinac	8	Kalkaska	2
Kalamazoo	7	Gogebic	1
Luce	7	Sanilac	1
Dickinson	7	Schoolcraft	0
Grand Traverse	7	Missaukee	−3
Eaton	6	Antrim	−3
Huron	6	Ontonagon	−30
St. Joseph	6		
Newaygo	6	Michigan	7
Hillsdale	6	United States	6

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

Table 2. Earnings Residence Adjustment for Michigan Counties: 1983

Dollar figures in thousands)

County	Labor and proprietors' earnings, by county earned	Residence adjustment	Labor and proprietors' earnings, by county received	Proportion[a]
	BOTTOM TEN			
Eaton	$217,190	$534,311	$751,501	0.7110
Clinton	153,573	285,724	439,297	0.6504
Livingston	309,008	554,688	863,696	0.6422
Leelanau	35,321	45,143	80,464	0.5610
Keweenaw	2,816	3,191	6,007	0.5312
Barry	137,605	153,830	291,435	0.5278
Lapeer	242,152	230,526	472,678	0.4877
Gladwin	44,797	39,011	83,808	0.4655
Shiawassee	253,133	218,346	471,479	0.4631
Cass	177,488	150,836	328,324	0.4594
	TOP TEN			
Otsego	89,158	−9,807	79,351	−0.1100
Saginaw	1,788,764	−227,901	1,560,863	−0.1274
Kent	4,145,365	−544,446	3,600,919	−0.1313
Grand Traverse	445,318	−64,482	380,836	−0.1448
Wexford	146,031	−24,273	121,758	−0.1662
Washtenaw	3,013,817	−501,583	2,512,234	−0.1664
Ontonagon	41,759	−8,486	33,273	−0.2032
Wayne	20,915,063	−4,338,370	16,576,693	−0.2074
Luce	43,690	−11,748	31,942	−0.2689
Ingham	3,393,820	−1,135,506	2,258,314	−0.3346
Michigan	69,778,627	506,825	70,285,452	0.0072
United States	1,825,145,008	−554,000	1,824,591,008	−0.0003

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

a. Residence Adjustment as percentage of labor and proprietors' earnings received (where positive) or generated (where negative).

sive as gross national product accounts for the United States. Michigan counties are ranked in Table 1 on the basis of earnings growth rates between 1982 and 1983.

RESIDENCE ADJUSTMENT

The numbers in Table 1 focus on economic activity taking place within counties, regardless of where the wage earners live. To calculate income received by persons within a county, the BEA has developed residence adjustments. For example, in 1983 residents of other counties earned $2,258,314 more in Ingham than Ingham residents earned elsewhere (see Table 4). That figure constitutes more than a third of total earnings generated in the county. Other counties exporting a large percentage of earnings or, correlatively, importing a large percentage of labor are Luce, Wayne, and Ontonagon. Although Wayne ranks third in the proportion of earnings going to outside residents, it has by far the largest sheer dollar volume.

In dollar volume of earnings imported or labor exported, Oakland is first and Macomb second, although in percentage ranking they are 35 and 25 respectively.

Table 3. Michigan Counties Most and Least Dependent on Property Income in Total Personal Income: 1983

County	Percentage	Per capita	County	Percentage	Per capita
	TOP TWENTY			**BOTTOM TWENTY**	
Roscommon	29.9	$2,510	Kalamazoo	16.1	$1,930
Huron	28.7	2,830	Allegan	16.0	1,490
Leelanau	28.3	2,940	Van Buren	15.9	1,440
Montmorency	27.8	2,260	Macomb	15.7	1,990
Benzie	26.7	2,300	Calhoun	15.5	1,720
Alcona	26.7	2,060	Montcalm	15.5	1,390
Antrim	26.1	2,200	Washtenaw	15.5	2,080
Oscoda	26.0	1,700	Ionia	14.9	1,340
Emmet	24.9	2,540	Clinton	14.8	1,590
Sanilac	24.8	2,250	Livingston	14.8	1,710
Crawford	23.7	1,710	Muskegon	14.8	1,430
Otsego	23.0	2,120	Shiawassee	14.6	1,470
Presque Isle	22.8	1,830	Monroe	14.5	1,550
Missaukee	22.5	1,580	Lapeer	14.4	1,430
Cheboygan	22.5	1,820	Eaton	14.4	1,660
Mackinac	22.3	2,000	Marquette	14.4	1,290
Ogemaw	22.2	1,550	Wayne	14.3	1,620
Manistee	22.1	2,000	Ingham	13.9	1,650
Mason	22.1	1,840	Luce	13.6	1,320
Gogebic	21.8	1,850	Genesee	13.2	1,570
			Michigan	16.3	1,870
			United States	18.5	2,160

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

Table 4. Transfer Payments Per Capita and Ranking of Michigan Counties According to Transfer Payments as a Percentage of Personal Income: 1983

County	Per capita	Percentage	County	Per capita	Percentage
	TOP TWENTY			**BOTTOM TWENTY**	
Lake	$2,760	42.3	Saginaw	$1,790	17.0
Keweenaw	3,150	40.1	Jackson	1,760	17.0
Montmorency	3,160	39.0	Lenawee	1,750	16.8
Alcona	2,870	37.1	Lapeer	1,630	16.5
Roscommon	3,060	36.3	Cass	1,540	15.5
Ontonagon	2,540	35.5	Genesee	1,840	15.5
Gogebic	2,870	33.8	Allegan	1,400	15.1
Ogemaw	2,300	32.9	Barry	1,420	15.1
Oscoda	2,140	32.6	Ingham	1,760	14.9
Clare	2,460	32.2	Monroe	1,550	14.6
Baraga	2,390	30.9	Kent	1,570	13.7
Luce	2,950	30.5	Kalamazoo	1,600	13.3
Schoolcraft	2,500	30.2	Macomb	1,520	12.0
Iron	2,820	30.0	Ottawa	1,320	12.0
Chippewa	2,300	29.8	Washtenaw	1,590	11.8
Gladwin	2,210	29.0	Clinton	1,180	11.0
Cheboygan	2,290	28.4	Eaton	1,240	10.8
Crawford	2,030	28.1	Midland	1,280	10.5
Houghton	2,220	28.0	Livingston	1,200	10.4
Arenac	2,180	27.5	Oakland	1,610	10.2
			Michigan	1,860	16.2
			United States	1,730	14.8

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

Table 5. Ranking of Michigan Counties According to Per Capita Personal Income: 1983

County	Per capita personal income	Percent change 1982-1983	County	Per capita personal income	Percent change 1982-1983
Oakland	$15,814	6.7	Manistee	$9,042	7.8
Washtenaw	13,414	6.9	Van Buren	9,029	8.1
Macomb	12,667	6.6	Marquette	9,003	5.6
Midland	12,245	6.5	Delta	8,983	4.7
Kalamazoo	11,966	8.1	Ionia	8,980	6.6
Genesee	11,876	9.0	Montcalm	8,968	7.0
Ingham	11,830	9.5	Alpena	8,947	7.7
Livingston	11,572	6.2	Menominee	8,907	5.7
Eaton	11,510	8.5	Benzie	8,623	5.1
Kent	11,463	7.6	Iosco	8,562	7.3
Wayne	11,368	6.5	Gogebic	8,490	6.0
Calhoun	11,082	5.0	Antrim	8,447	3.2
Ottawa	10,968	7.5	Roscommon	8,415	4.7
Dickinson	10,790	7.5	Wexford	8,397	8.0
Grand Traverse	10,785	6.3	Mason	8,308	7.4
St. Clair	10,771	6.2	Kalkaska	8,252	4.7
Clinton	10,696	8.7	Schoolcraft	8,252	2.7
Monroe	10,677	6.2	Isabella	8,232	6.0
Saginaw	10,554	6.6	Newaygo	8,166	6.6
Bay	10,434	6.4	Montmorency	8,158	3.9
Lenawee	10,423	6.7	Cheboygan	8,075	5.0
Leelanau	10,396	8.3	Keweenaw	8,033	10.4
Jackson	10,329	5.2	Presque Isle	8,022	5.3
Berrien	10,314	6.3	Houghton	7,946	9.5
Emmet	10,191	9.0	Oceana	7,943	5.2
Shiawassee	10,091	4.8	Arenac	7,915	5.4
St. Joseph	10,034	8.2	Alger	7,907	6.6
Cass	9,928	8.8	Baraga	7,719	4.4
Branch	9,916	8.7	Chippewa	7,719	5.9
Lapeer	9,875	5.3	Alcona	7,698	2.7
Huron	9,852	6.1	Gladwin	7,634	5.1
Gratiot	9,749	5.4	Clare	7,618	6.1
Muskegon	9,671	5.2	Osceola	7,353	5.9
Luce	9,613	8.1	Crawford	7,250	0.6
Barry	9,404	7.1	Ontonagon	7,149	−4.3
Iron	9,396	7.6	Missaukee	7,028	6.5
Allegan	9,292	6.6	Ogemaw	6,986	2.3
Hillsdale	9,284	6.6	Oscoda	6,534	4.2
Otsego	9,236	7.4	Mecosta	6,533	6.7
Tuscola	9,207	5.8	Lake	6,476	4.0
Charlevoix	9,163	4.6			
Sanilac	9,083	2.2	Michigan	11,476	6.8
Mackinac	9,045	6.8	United States	11,687	5.2

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

These figures merely illustrate what is common knowledge—the dependence of Oakland and Macomb residents on Wayne County jobs is not inconsequential. In a relative sense, the greatest such dependence in this state is Eaton's reliance on Ingham.

PROPERTY INCOME AND TRANSFER PAYMENTS

Total personal income is the sum of earnings received and income that entails no labor in return. The latter has two components: property income and transfer payments. Property income is received as dividends, interest, and rent by owners of capital. Transfer payments include Social Security and other pensions, welfare benefits, unemployment compensation, and other income not linked to current production or to capital ownership.

PERSONAL INCOME

The sum of earnings received, property income, and transfer payments is a broad yardstick of the income available to individuals. Per capita personal income indicates how counties fare on the average in the acquisition of slices of national "pie." Oakland County does exceptionally well in this regard because it has high-paying industry and because well-paid workers with jobs elsewhere reside there (see Table 5). Michigan's other counties with heavy dependence on manufacturing also rank high in per capita income because the majority of those jobs are high paying.

Most northern Michigan counties in the Lower Peninsula have low per capita incomes because a high proportion of their residents are retirees living on accumulated wealth and pensions. Also, the retail and service industries that cater to them and to summer visitors offer low-paying jobs for the most part. The area provides summer employment for high school and college students as well as for older workers who live there. A survey of the economic attitudes of residents would likely find that those in Roscommon, Benzie, Antrim, Leelanau, and Emmet counties consider themselves well off, even though their per capita incomes are well below Michigan and national averages. In contrast according to the most recent Census of Population (1980, based on 1979 incomes), the incidence of poverty among permanent residents was a ratio of 1:7 or more in Oscoda, Missaukee, Lake, Ogemaw, Clare, Alcona, Gladwin, Arenac, Kalkaska, Montmorency, Chippewa, Presque Isle, and Cheboygan. Among metropolitan counties, Wayne was the only one experiencing poverty at that level.

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OVERALL ASSESSMENT

We also asked respondents how likely it was that they would locate a new facility in Michigan and what their overall assessment of the business climate in Michigan was compared to that of other states. A whopping 83 percent of the respondents said the business climate was moderately or a great deal worse than other states; only 60 percent said they definitely or probably would locate in Michigan if they were building in the next five years. What accounts for the divergent percentages? First of all, just perceiving a negative situation is clearly not enough to make an executive move a plant. Many may not have complete control over the resources and decisions to move, and many know that there are other costs when a move is actually made. For example, 60 percent of our sample said that relocating was quite risky or the most risky decision an executive had to make. Indeed, 52 precent of the sample indicated that they had never considered another state when deciding to relocate a plant.

Michigan business executives may report that the climate does not favor their companies, but our data do show that incentives are available and that many companies will stay in spite of their reported low opinion of the state. We asked all respondents whether or not they had been offered each of the following inducements to expand or relocate their facilities in Michigan or another state and how important each incentive was. Importance ratings were made on a four-point scale ranging from 1, of no importance at all, to 4, very important.

Inducement	Mean importance
Land	2.71
Low-rent plant	2.84
Tax abatement	3.55
Low-cost financing	3.44
Training programs	2.52
Industrial park	2.31

Tax abatements and low-cost financing are clearly the most important to the business community, and our data indicate these incentives frequently are used by Michigan governmental units to attract or keep existing firms. However, a larger portion of our respondents report receiving such incentives elsewhere, suggesting that Michigan might do more in this regard when those incentives are appropriate. Comparison by SIC group indicated that while all firms viewed tax abatements as fairly important, this was especially true for fabricated metals, chemicals, and food processing groups. Training programs were of most importance to transportation equipment, fabricated metals, and machinery concerns and of less importance to food processing, lumber and wood, and chemicals firms. Differences in the importance of the other four incentives across SIC groups were not statistically significant.

Our study shows that executives do report a negative business climate, and they also report that other states are better in many respects. But the location of customers, materials, and services score as positives in Michigan as does the availability of a skilled labor force. Availability of less skilled workers and other labor-related factors are not pluses for Michigan. Perhaps we should think more about the role of our colleges and universities in the upgrading of our labor force; a skilled/technical professional work force is now a strength of Michigan, but education must keep pace with the changing demands for labor. Executives report being offered inducements to stay and to expand in Michigan, but policymakers might well think of new inducements that will help defray the costs of doing business in Michigan. Thus, even though some of the perceived negatives, such as the cost of workers' compensation, might remain high, the benefits of low rent and low-cost financing could easily offset the other outlays if their value became more apparent to business leaders. Finally, business relocation and expansion are not simple functions of perceived good or bad business climate or more companies would report moving out of state. Undoubtedly, business leaders in other states may have similar complaints. In our sample most report that they would stay in Michigan if faced with a relocation decision. However, Michigan's negative business-climate image is real, and if we are to rely on Michigan business to sell Michigan to outsiders, we need to institute appropriate policy changes and to promote and publicize Michigan's true business climate.

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